CLAIMS

1.   An interaction prediction system comprising:

a memory in which is maintained a neural network trained on data retrieved

5   from an interaction database of interaction data representing interactions between

customers and merchants;

retrieval means arranged to activate the neural network and to retrieve

prediction data representing future interactions between customers and merchants;

and

10   display means arranged to display a representation of the prediction data.

2.   A system as claimed in claim 1 wherein the interaction data includes the

date and/or time of the interaction and wherein the neural network is trained on

data including the date and/or time of the interaction.

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3.   A system as claimed in claim 1 or claim 2 wherein one or more of the

merchants operate from one or more commercial premises, the interaction data

includes the monetary value of the interaction and wherein the neural network is

trained on data including the monetary value of the interaction.

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4.   A system as claimed in claim 3 wherein one or more of the merchants

operates a casino or gaming venue comprising one or more gaming machines, each

gaming machine having a machine identifier.

25   5.   A system as claimed in claim 4 wherein the interaction data includes a

machine identifier for each interaction and wherein the neural network is trained on

data including the machine identifier for interactions between customers and

merchants.

30   6.   A system as claimed in claim 4 or claim 5 wherein each gaming machine has

a spatial position, the interaction data includes the spatial position of the machine

involved in the interaction and wherein the neural network is trained on data

including the spatial position of the machine involved in the interaction.

35   7.   A system as claimed in claim 6 wherein the neural network is trained on

data including the machine identifier and/or spatial position of machines

neighbouring each machine involved in interactions between customers and

merchants.

8.   A neural network training system comprising:

a memory in which is maintained an interaction database of interaction data representing interactions between customers and merchants;

5   retrieval means arranged to retrieve from the interaction database data representing interactions between customers and merchants;

a neural network arranged to receive input data representing the data retrieved from the interaction database and to output prediction data representing interaction data predicted by the neural network; and

10   training means arranged to compare the data retrieved from the interaction database and the prediction data and to adjust the neural network based on the comparison.

9.   A neural network training system as claimed in claim 8 wherein the
15   interaction data includes the date and/or time of the interaction, the neural network further arranged to receive as input the date and/or time of interactions between customers and merchants.

10.   A neural network training system as claimed in claim 8 or claim 9 wherein
20   one or more merchants operates from one or more commercial premises, the interaction data includes the monetary value of the interaction and wherein the neural network is further arranged to receive as input the monetary value of the interaction.

25   11.   A neural network training system as claimed in claim 10 wherein the merchant operates a casino or gaming venue comprising one or more gaming machines, each gaming machine having a machine identifier.

12.   A neural network training system as claimed in claim 11 wherein the
30   interaction data includes a machine identifier for each interaction, the neural network further arranged to receive as input the machine identifier for interactions between customers and merchants.

13.   A neural network training system as claimed in claim 11 or claim 12 wherein
35   each gaming machine has a spatial position, the interaction data includes the spatial position of the machine involved in the interaction and wherein the neural network is further arranged to receive as input the spatial position of the machine involved in the interaction.

14.   A neural network training system as claimed in claim 13 wherein the neural network is arranged to receive as input the machine identifier and/or spatial position of machines neighbouring each machine involved in interactions between customers and merchants.

15.   An interaction prediction computer program comprising:

a neural network maintained in a memory, the neural network trained on data retrieved from an interaction database of interaction data representing interactions between customers and merchants;

retrieval means arranged to activate the neural network and to retrieve prediction data representing future interactions between customers and merchants; and

display means arranged to display a representation of the prediction data.

16.   A computer program as claimed in claim 15 wherein the interaction data includes the date and/or time of the interaction and wherein the neural network is trained on data including the date and/or time of the interaction.

17.   A computer program as claimed in claim 15 or claim 16 wherein one or more of the merchants operate from one or more commercial premises, the interaction data includes the monetary value of the interaction and wherein the neural network is trained on data including the monetary value of the interaction.

18.   A computer program as claimed in claim 17 wherein one or more of the merchants operates a casino or gaming venue comprising one or more gaming machines, each gaming machine having a machine identifier.

19.   A computer program as claimed in claim 18 wherein the interaction data includes a machine identifier for each interaction and wherein the neural network is trained on data including the machine identifier for interactions between customers and merchants.

20.   A computer program as claimed in claim 18 or claim 19 wherein each gaming machine has a spatial position, the interaction data includes the spatial position of the machine involved in the interaction and wherein the neural network is trained on data including the spatial position of the machine involved in the interaction.

21.   A computer program as claimed in claim 20 wherein the neural network is trained on data including the machine identifier and/or spatial position of machines neighbouring each machine involved in interactions between customers and merchants.

22.   A computer program as claimed in any one of claims 15 to 21 embodied on a computer readable medium.

23.   A neural network training computer program comprising:

an interaction database of interaction data representing interactions between customers and merchants maintained in a memory;

retrieval means arranged to retrieve from the interaction database data representing interactions between customers and merchants;

a neural network maintained in a memory, the neural network arranged to receive input data representing the data retrieved from the interaction database and to output prediction data representing interaction data predicted by the neural network; and

training means arranged to compare the data retrieved from the interaction database and the prediction data and to adjust the neural network based on the comparison.

24.   A computer program as claimed in claim 23 wherein the interaction data includes the date and/or time of the interaction, the neural network further arranged to receive as input the date and/or time of interactions between customers and merchants.

25.   A computer program as claimed in claim 23 or claim 24 wherein one or more merchants operates from one or more commercial premises, the interaction data includes the monetary value of the interaction and wherein the neural network is trained on data including the monetary value of the interaction.

26.   A computer program as claimed in claim 25 wherein the merchant operates a casino or gaming venue comprising one or more gaming machines, each gaming machine having a machine identifier.

27.   A computer program as claimed in claim 26 wherein the interaction data includes a machine identifier for each interaction, the neural network further

arranged to receive as input the machine identifier for interactions between customers and merchants.

28.   A computer program as claimed in claimed in claim 26 or claim 27 wherein
5   each gaming machine has a spatial position, the interaction data includes the spatial position of the machine involved in the interaction and wherein the neural network is further arranged to receive as input the spatial position of the machine involved in the interaction.

10   29.   A computer program as claimed in claim 28 wherein the neural network is arranged to receive as input the machine identifier and/or spatial position of machines neighbouring each machine involved in interactions between customers and merchants.

15   30.   A computer program as claimed in any one of claims 23 to 29 embodied on a computer readable medium.

31.   A method of predicting interactions between customers and merchants, the method comprising the steps of:
20   maintaining in a memory a neural network trained on data retrieved from an interaction database of interaction data representing interactions between customers and merchants;
        activating the neural network;
        retrieving prediction data representing future interactions between
25   customers and merchants from the neural network; and
        displaying a representation of the prediction data.

32.   A method as claimed in claim 31 wherein the interaction data includes the date and/or time of the interaction and wherein the neural network is trained on
30   data including the date and/or time of the interaction.

33.   A method as claimed in claim 31 or claim 32 wherein one or more of the merchants operate from one or more commercial premises, the interaction data includes the monetary value of the interaction and wherein the neural network is
35   trained on data including the monetary value of the interaction.

34. A method as claimed in claim 33 wherein one or more of the merchants operates a casino or gaming venue comprising one or more gaming machines, each gaming machine having a machine identifier.

5 35. A method as claimed in claim 34 wherein the interaction data includes a machine identifier for each interaction and wherein the neural network is trained on data including the machine identifier for interactions between customers and merchants.

10 36. A method as claimed in claim 34 or claim 35 wherein each gaming machine has a spatial position, the interaction data includes the spatial position of the machine involved in the interaction and wherein the neural network is trained on data including the spatial position of the machine involved in the interaction.

15 37. A method as claimed in claim 36 wherein the neural network is trained on data including the machine identifier and/or spatial position of machines neighbouring each machine involved in interactions between customers and merchants.

20 38. A method of training a neural network comprising the steps of:

maintaining in a memory an interaction database of interaction data representing interactions between customers and merchants;

retrieving from the interaction database data representing interactions between customers and merchants;

25 arranging a neural network to receive input data representing the data retrieved from the interaction database and to output prediction data representing interaction data predicted by the neural network; and

comparing the data retrieved from the interaction database and the prediction data and adjusting the neural network based on the comparison.

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39. A method of training a neural network as claimed in claim 38 wherein the interaction data includes the date and/or time of the interaction, the method comprising the step of arranging the neural network to receive as input the date and/or time of interactions between customers and merchants.

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40. A method of training a neural network as claimed in claim 38 or claim 39 wherein one or more merchants operates from one or more commercial premises and the interaction data includes the monetary value of the interaction, the method

further comprising the step of arranging the neural network to receive as input the monetary value of the interaction.

41.   A method of training a neural network as claimed in claim 40 wherein the merchant operates a casino or gaming venue comprising one or more gaming machines, each gaming machine having a machine identifier.

42.   A method of training a neural network as claimed in claim 41 wherein the interaction data includes a machine identifier for each interaction, the method further comprising the step of arranging the neural network to receive as input the machine identifier for interactions between customers and merchants.

43.   A method of training a neural network as claimed in claimed in claim 41 or claim 42 wherein each gaming machine has a spatial position and the interaction data includes the spatial position of the machine involved in the interaction, the method further comprising the step of arranging the neural network to receive as input the spatial position of the machine involved in the interaction.

44.   A method of training a neural network as claimed in claim 43 further comprising the step of arranging the neural network to receive as input the machine identifier and/or spatial position of machines neighbouring each machine involved in interactions between customers and merchants.

45.   A neural network trained by the method as claimed in any one of claims 38 to 44.